

Appln No. 09/454,219
Amdt date August 25, 2004
Reply to Office action of May 26, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-57. (Cancelled)

58. (Currently Amended) A communications system, comprising:

a first rate negotiator configured to negotiate a data rate with a first telephony device over a first network line, and renegotiate the negotiated data rate with a second rate negotiator coupled to a remote system over a packet-based second network line, the remote system comprising a second telephony device, wherein the first rate negotiator and the second rate negotiator communicate over a packet based network; and

a data exchange configured to exchange data signals between the first telephony device and the remote system over the packet based network at the renegotiated data rate.

59. (Previously Presented) The communications system of claim 58 wherein the data exchange comprises a data pump configured to demodulate the data signals from the first telephony device for transmission over the packet based network to the remote system at the renegotiated data rate, and modulate the data signals from the remote system with a voiceband carrier for transmission over the network line to the first telephony device at the renegotiated data rate.

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60. (Currently Amended) ~~The A~~ communications system ~~of~~
~~claim 59 further~~ comprising

a rate negotiator configured to negotiate a data rate
with a first telephony device over a network line, and
renegotiate the negotiated data rate with a remote system over a
packet based network, the remote system comprising a second
telephony device;

a data exchange configured to exchange data signals
between the first telephony device and the remote system at the
renegotiated data rate; and

spoofing logic configured to spoof the first telephony
device in response to a delay of the data signals from the
remote system.

61. (Currently Amended) The communications system of claim
60 wherein the spoofing logic is configured to couple spoofing
data to ~~the~~ a data pump in response to the delay of the data
signals from the remote system, the data pump spoofing the first
telephony device with the spoofing data.

62. (Previously Presented) The communications system of
claim 60 further comprising a jitter buffer configured to buffer
the data signals from the packet based network, the jitter
buffer causing the spoofing logic to spoof the first telephony
device when the data signals buffered are below a threshold.

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63. (Currently Amended) The communications system of claim 62 wherein the jitter buffer is configured to cause the spoofing logic to couple spoofing data to ~~the~~ a data pump when the buffered data signals are below the threshold, the data pump spoofing the first telephony device with the spoofing data.

64. (Currently Amended) The communications system of claim 59 58 further comprising a clock synchronizer configured to control the renegotiated data rate of ~~the~~ a data pump.

65. (Previously Presented) The communications system of claim 64 further comprising a jitter buffer configured to buffer the data signals from the packet based network, the control of the renegotiated data rate of the data pump by the clock synchronizer being a function of the buffered data signals.

66. (Previously Presented) The communications system of claim 65 wherein clock synchronizer is configured to control the renegotiated data rate of the data pump by increasing the renegotiated data rate of the data pump if the buffered data signals exceed a first threshold and decreasing the renegotiated data rate of the data pump if the buffered data signals are below a second threshold.

67. (Currently Amended) A method of communications, comprising:

negotiating a data rate with a first telephony device over a first network line;

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renegotiating the negotiated data rate with a second rate negotiator coupled to a remote system over a second packet based network line, the remote system comprising a second telephony device;

communicating between the first rate negotiator and the second rate negotiator over a packet based network; and

exchanging data signals between the first telephony device and the remote system over the packet based network at the renegotiated data rate.

68. (Previously Presented) The method of claim 67 wherein the exchange of data signals comprises demodulating the data signals from the first telephony device for transmission over the packet based network to the remote system at the renegotiated data rate, and modulating the data signals from the remote system with a voiceband carrier for transmission over the network line to the first telephony device at the renegotiated data rate.

69. (Currently Amended) ~~The A method of claim 68 further~~ communications, comprising

negotiating a data rate with a first telephony device over a network line;

renegotiating the negotiated data rate with a remote system over a packet based network, the remote system comprising a second telephony device;

exchanging data signals between the first telephony device and the remote system at the renegotiated data rate; and

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spoofing the first telephony device in response to a delay of the data signals from the remote system.

70. (Currently Amended) The method of claim ~~68~~ 67 further comprising buffering the data signals from the packet based network, the first telephony device being spoofed when the data signals buffered are below a threshold.

71. (Currently Amended) The method of claim ~~68~~ 69 wherein the first telephony device comprises a facsimile machine.

72. (Currently Amended) The method of claim ~~68~~ 69 further comprising buffering the data signals from the packet based network, and controlling the renegotiated data rate as function of the buffered data signals.

73. (Previously Presented) The method of claim 72 wherein the control of the renegotiated data rate comprises increasing the renegotiated data rate if the buffered data signals exceed a first threshold and decreasing the renegotiated data rate if the buffered data signals are below a second threshold.

74. (Currently Amended) The method of claim ~~68~~ 69 wherein the first and second telephony devices each comprises a telephone.

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75. (Currently Amended) The method of claim ~~68~~ 69 wherein the first and second telephony devices each comprises a facsimile machine.

76. (Currently Amended) The method of claim ~~68~~ 69 wherein the first and second telephony devices each comprises a modem.

77. (Currently Amended) Computer-readable media embodying a program of instructions executable by a computer to perform a method of communications, the method comprising:

negotiating a data rate with a first telephony device over a first network line;

renegotiating the negotiated data rate with a second rate negotiator coupled to a remote system over a second packet based network line, the remote system comprising a second telephony device;

communicating between the first rate negotiator and the second rate negotiator over a packet based network; and

exchanging data signals between the first telephony device and the remote system over the packet based network at the renegotiated data rate.

78. (Previously Presented) The computer-readable media of claim 77 wherein the exchange of data signals comprises demodulating the data signals from the first telephony device for transmission over the packet based network to the remote system at the renegotiated data rate, and modulating the data signals from the remote system with a voiceband carrier for

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transmission over the network line to the first telephony device at the renegotiated data rate.

79. (Currently Amended) ~~The computer-readable media of claim 78 wherein the method further comprises~~ embodying a program of instructions executable by a computer to perform a method of communications, the method comprising:
negotiating a data rate with a first telephony device over a network line;
renegotiating the negotiated data rate with a remote system over a packet based network, the remote system comprising a second telephony device;
exchanging data signals between the first telephony device and the remote system at the renegotiated data rate; and
spoofing the first telephony device in response to a delay of the data signals from the remote system.

80. (Currently Amended) The computer-readable media of claim ~~78~~ 79 wherein the method further comprises buffering the data signals from the packet based network, the first telephony device being spoofed when the data signals buffered are below a threshold.

81. (Currently Amended) The computer-readable media of claim ~~78~~ 79 wherein the method further comprises buffering the data signals from the packet based network, and controlling the renegotiated data rate as function of the buffered data signals.

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82. (Previously Presented) The computer-readable media of claim 81 wherein the control of the renegotiated data rate comprises increasing the renegotiated data rate if the buffered data signals exceed a first threshold and decreasing the renegotiated data rate if the buffered data signals are below a second threshold.